

REMARKS/ARGUMENTS

Applicant has reviewed the Office Action dated as mailed March 16, 2006 and the document cited therewith and the present response has been prepared in response thereto. The Examiner has rejected claims 5, 8, and 9 under 35 U.S.C. § 102(b) as being anticipated and/or under 35 U.S.C. § 103(a) as being obvious in view of U.S. Patent 5,168,839 to Hitomi et al. Specifically, Examiner refers to Figures 4 for this rejection. It is submitted the claims are not anticipated by or obvious in light of the '839 patent and that the claims define over the art of record. Applicant hereby requests reconsideration in view of the remarks made below.

A review of the '839 patent shows that the reference does not anticipate the claims or render them obvious for at least the following reasons. As provided in claim 5, the side wall of the housing defines at least one air-fuel out-flow passage from the interior cavity of the housing to the exterior surface, whereas in the '839 patent, the air-fuel out-flow-passages 11 is not defined by the side wall of the housing defining the interior cavity but rather constitute passages extending from the side wall. Examiner noted that this distinction may have been too subtle and therefore lost on the Examiner. However, this is a very important point, because it goes to the heart of one of the aspects of the invention, namely the compact nature of the intake manifold which enables it to be used with an air compressor attached to the top plate, yet fit within an OEM hood. One of the reasons it is so compact and able to perform this function is because the sidewall (which constitutes the housing) defines the plenum area (i.e., interior cavity) of the intake manifold area also defines the runners (i.e., the air-fuel out-flow passages), and the runners do not extend beyond the outer wall of the plenum area. Therefore, the runners are very short, no longer than the thickness of the plenum area sidewall. This is in contrast to Figure 4 of the '839 patent, which shows a standard setup where the runners 11 extend extensively from the plenum area, rather than are merely contained within the wall which forms the plenum area. (Please refer to the simplified sketch found in Appendix A to demonstrate the distinction.) By way of analogy, picture a box which needs air to pass through it. One could jab straws into the side, which would enable air to flow from inside the box to the outside, but would have the long straws extending from the outside of the box. Or one could simply punch holes in the side of box, leaving the

outside of the box smooth. The '839 patent is like the box with straws sticking out of the sides, while the present invention is like the box with the holes punched in it. The box with the holes punched in it could fit in a tighter space than the box with straws sticking out, and that compactness is very important. That is the distinction between the '839 patent, in which the out-flow passage extends from the sidewall, and the present invention, in which the out-flow passage is defined by the sidewall and does not extend beyond. Therefore, the exterior of the sidewall of the plenum area is able to contact the engine block, directly feeding the air-fuel mixture from the out-flow passages in the sidewall to the engine, rather than having to travel through extended runners from the plenum area to the engine, taking up space.

Further in claim 5, the fuel in-flow passage extends from the exterior surface of the sidewall to the air-fuel out-flow passage between the interior cavity and the exterior surface. The fuel in-flow passage does not pass through the interior cavity (i.e., plenum area). However, in Figure 4 of the '839 patent, the fuel in-flow passage passes from the exterior surface of the plenum area through the interior surface of the plenum area into the plenum area, housing a fuel injector 20 which extends through the plenum area into the runners 11. Therefore, neither the fuel in-flow passage nor the fuel injector 20 in the '839 patent pass through between the interior cavity and the exterior surface to reach air-fuel out-flow passage as is required by claim 5; instead, the fuel in-flow passage opens into the plenum area, and the injector 20 reaches the air-fuel out-flow passage (i.e., runner 11) through the plenum area, a significant distinction.

Therefore, in light of the foregoing distinctions, the present invention is not anticipated by or obvious in light of the '839 patent. Thus it is submitted that rejection of claims 5, 8, and 9 as being anticipated by or obvious in light of the reference should be withdrawn. Applicant hopes that any subtlety as to the distinctions has been clarified for the Examiner. Claims 5, 8, and 9 define over the art of record and should be allowed.


Applicant greatly appreciates the Examiners attention to and assistance with this application. Reconsideration and allowance is hereby requested. No additional fee is due. If the Examiner has any questions or anticipates not allowing the application due to some matter that Applicant has overlooked, a telephone interview is requested.

Respectfully submitted,

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